

Just the Facts: Bike Path Railing

The new SFOBB East Spans bike path extends from the Oakland mole to Yerba Buena Island. It is not simply part of the roadway; it is a separate structure attached to the south side of the new East Spans. The bike path not only creates an accessible link to Yerba Buena Island for the safe enjoyment of pedestrians and bicyclists but was also design with aesthetics in mind.

The bike path railing was fabricated by many different fabrication suppliers over multiple construction contracts to include the Yerba Buena Island Transition Structures Contract No. 2 (YBITS), Self Anchored Suspension Span (SAS), Skyway, and Oakland Touch Down Contracts No.'s 1 and 2 (OTD). Of these contracts, Zhenhua Port Machinery Company in China and Kwan Wo Ironworks Inc. of Hayward, fabricated the railing sections for the SAS and Skyway, respectively. These sections were then installed by American Bridge/Flour (ABF) on the SAS, and Keiwit/Flatiron/Manson (KFM) on the Skyway.

The Skyway, completed in 2008, was the first competed contract with the SAS and OTD to follow, culminating in the opening of the bike path to use Labor Day 2013. This five year lag in time (2008 to 2013) allowed the opportunity to monitor the performance of the various aspects of the bike path sections including the railing itself. This performance period also known as a "shakedown" period allowed for necessary modifications prior to the opening of the bike path.

Railing modifications were made to address safety, long term maintenance, and aesthetics. With the bike path fabricated and installed over multiple construction contracts involving different fabricators, maintaining a consistent aesthetic appearance from one section to another was a challenge.

As an example the following is a list of changes made to the bike path railings over the various contracts:

- 1. Changes were made to allow for larger thermal movement at the connection of the railings across the individual joints of the steel bike path sections for the SAS and Skyway.
- Changes were made on the SAS and Skyway to route the railing light fixture electrical conduits through the interior of the bike path sections.
- 3. Modifications to the railing shims were made across all Contracts to not only provide for a smooth railing profile but also address corrosion, long term maintenance, and aesthetics.
- 4. The emergency access gates on the Skyway were modified to address operational issues to ensure they open and close smoothly in case of an emergency.
- 5. Aesthetic modifications were made to the SAS and Oakland Touchdown railings light fixtures and grillages to ensure a consistent aesthetic appearance consistent with the completed Skyway railings.